RESPONSE TO COMMENTS GEM MEAT PACKING COMPANY

A draft National Pollutant Discharge Elimination System (NPDES) permit for Gem Meat Packing Company was issued for Public Notice on June 11, 1999. The Public Notice initiated a 30-day public comment period expiring on July 12, 1999. The Environmental Protection Agency (EPA) received written comments dated July 12, 1999 from the City of Boise. The original Fact Sheet provided during the Public Notice period will not be modified to reflect any changes made to the permit resulting from public comments. The following is a summary of the substantive comments related to the draft permit and EPA's response.

1. **Comment**: The permit and fact sheet rely on twenty year old ambient temperature data to conclude exceedances of the state temperature criteria for the protection of cold water biota and salmonid spawning. More recent data exists at the Veteran's Parkway Bridge, one and one-half river miles downstream of Gem Meat's discharge.

Response: The ambient temperature data originally used by the EPA was from the United States Geological Survey (USGS) station 13205500-Boise River at Boise and dates from February 1973 to October 1982. The EPA also considered USGS station 13206000-Boise River at Glenwood which dates from October 1970 to October 1992. Both of these stations show exceedences of the state water quality criteria for temperature. In response to the comment, EPA evaluated the Veteran's Parkway Bridge data that was gathered quarterly in accordance with the City of Boise, Lander Street permit and found that it also violated the states temperature criteria. The temperature criterion for salmonid spawning from October 1 through July 15 was exceeded nine times and the criteria for cold water biota (July 16 through September 30) was exceeded three times using the Veteran's Bridge data.

2. **Comment**: EPA did not consider Section 401 of Idaho's water quality standards, specifically IDAPA 16.01.02.401.03.a, which allows a one degree Celsius (EC) increase.

Response: Section 401 of the State's standard applies to point sources "unless more stringent limitations are necessary to meet the applicable requirements of Sections 200 through 300..." In this case, more stringent temperature limitations do apply under IDAPA 16.01.02.250.02© and d) for the protection of cold water biota and salmonid spawning. Cold water biota and salmonid spawning are designated use classifications for the Boise River. Section 401 also applies to the receiving water outside of the mixing zone. In this case, a mixing zone is not available because the ambient temperature of the River already violates the state's temperature criteria for cold water biota and salmonid spawning (see response #1).

3. **Comment**: A reasonable potential analysis to exceed temperature water quality standards was not conducted for Gem Meat.

Response: A "reasonable potential" evaluation is only necessary when the maximum

reported effluent value is less than the most stringent applicable criterion for that pollutant. The reasonable potential evaluations (consistent with EPA's 1991 Technical Support Document for Water Quality-based Toxics Control) take into account the variability of the monitoring data (a.k.a. coefficient of variation) and the number of monitoring samples available. When a mixing zone is available in the receiving water, the upstream concentration, effluent flow, and river flow are also utilized. Because the maximum reported daily value for temperature (26.6EC in the winter and 28EC in the summer) is greater than the state criterion for salmonid spawning and cold water biota an analysis is not necessary.

4. **Comment**: The fact sheet incorrectly concludes that no dilution or mixing zone is available. The state standards found at IDAPA 16.01.02.401 and IDAPA 16.01.02.060 address dilution.

Response: As explained in the first response, the ambient data available at two USGS stations as well as the Veteran's Parkway Bridge station violate the state's temperature criterion for salmonid spawning and cold water biota. When water quality criteria are not met in-stream, mixing or dilution is not available as required by IDAPA 16.01.02.401. The mixing zone policy found at IDAPA 16.01.02.060 requires that discharges not cause unreasonable interference with existing beneficial uses. Because the beneficial use of the Boise River is already at risk, any increased thermal loading above that required of the beneficial use criteria would be inappropriate.

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5. **Statement**: The temperature requirement can be made less stringent without violating the requirements of state law, including water quality standards, by following section 16.01.02.401.03.a which allows one degree temperature rise. More recent instantaneous instream water temperature for the Veteran's Parkway Bridge exists (1987 to present). The data is consistent with the 1996 and 1998 303(d) lists, which do not include this segment as water quality limited for temperature.

Response: See response #1 and #2. The IDEQ has not authorized a mixing zone for Gem Meat's discharge. Without a mixing zone, section 16.01.02.401.03.a does not apply.